CLAIMS:

Having thus described our invention, what we claim as
new, and desire to secure by Letters Patent is:

1   1. A method for providing a high fidelity
2   simulation of a client/server system including a server
3   and a plurality of locally attached intelligent client
4   workstations, the method comprising:
5   simulating at level 2 of a protocol stack by
6   formulating one or more client requests to have unique
7   client identifiers incorporated at the level 2 of a
8   protocol stack before transmitting said one or more
9   client requests on a communications channel having a
10   routing access to a server for servicing said one or more
11   client requests.

1   2. A method for providing a high fidelity
2   simulation of remotely attached intelligent workstations,
3   the method comprising:
4   simulating at level 3 of a protocol stack by
5   formulating one or more client requests to have unique
6   client identifiers and a network address associated with
7   the unique client identifiers incorporated at the level 3
8   of a protocol stack before transmitting said one or more
9   client requests on a communications channel having a
10   routing access to a server for servicing said one or more
11   client requests.

1   3. The method as claimed in claim 1, wherein the
2   step of simulating at level 2 of the protocol stack
3   includes:

4   formulating data to emulate a client request to
5   submit to the server;
6   padding the formulated data with header data that
7   conforms to communications protocol used by the server
8   receiving the client request; and
9   producing one or more level 2 data frames from the
10   padded data by inserting a unique client address into the
11   padded data, the unique client address representing a
12   unique client workstation that submitted the client
13   request.

1   4.   The method as claimed in claim 3, wherein the
2   method further includes:
3   placing said one or more level 2 data frames on the
4   communications channel.

1   5.   The method as claimed in claim 3, wherein the
2   method further includes:
3   maintaining independent client states for each
4   client request submitted by said unique client
5   workstation.

1   6.   The method as claimed in claim 5, wherein the
2   step of maintaining independent client states further
3   includes:
4   emulating a client in an idle state to trigger a
5   timeout event.

1   7.   The method as claimed in claim 3, wherein the
2   method further includes:
3   maintaining independent client states for each

4   client request submitted by a plurality of said unique
5   client workstation.

1   8.   The method as claimed in claim 3, the method
2   further including:
3   incorporating static instructions that emulate user
4   actions; and
5   formulating data to emulate a client request to
6   submit to a server in response to the incorporated static
7   instructions.

1   9.   The method as claimed in claim 3, the method
2   further including:
3   dynamically loading instructions that emulate user
4   actions; and
5   formulating data to emulate a client request to
6   submit to a server in response to the dynamically loaded
7   instructions.

1   10.   The method as claimed in claim 3, the method
2   further including:
3   receiving operator inputs at a workstation; and
4   formulating data to emulate a client request to
5   submit to a server in response to the received operator
6   inputs.

1   11.   The method as claimed in claim 1, wherein the
2   communications channel includes a local area network
3   (LAN).

1   12.   The method as claimed in claim 1, wherein the
2   communications channel includes a physical communications

PO999-092   -33-

3   device.

1   13.   The method as claimed in claim 1, wherein the
2   communications channel includes an input/output buffer
3   internal to the server.

1   14.   The method as claimed in claim 2, wherein the
2   step of simulating at level 3 of the protocol stack
3   includes:
4   formulating data to emulate a client request to
5   submit to the server;
6   padding the formulated data with header data that
7   conforms to communications protocol used by the server
8   receiving the client request; and
9   producing one or more level 3 data frames from the
10   padded data by inserting a unique client address and a
11   network address associated the unique client address into
12   the padded data, the unique client address representing a
13   unique client workstation that submitted the client
14   request.

1   15.   A program storage device readable by machine,
2   tangibly embodying a program of instructions executable
3   by the machine to perform the method steps of providing a
4   high fidelity simulation of locally attached intelligent
5   workstations, the method steps comprising:
6   simulating at level 2 of a protocol stack by
7   formulating one or more client requests to have unique
8   client identifiers incorporated at the level 2 of a
9   protocol stack before transmitting said one or more
10   client requests on a communications channel having a

11   routing access to a server for servicing said one or more

12   client requests.

1   16.   A program storage device readable by machine,

2   tangibly embodying a program of instructions executable

3   by the machine to perform the method steps of providing a

4   high fidelity simulation of remotely attached intelligent

5   workstations, the method steps comprising:

6   simulating at level 3 of a protocol stack by

7   formulating one or more client requests to have unique

8   client identifiers and a network address associated with

9   the unique client identifiers incorporated at the level 3

10   of a protocol stack before transmitting said one or more

11·   client requests on a communications channel having a

12   routing access to a server for servicing said one or more

13   client requests.

1   17.   An apparatus for providing a high fidelity

2   simulation of a client/server system including a server

3   and a plurality of locally attached intelligent client

4   workstations, the apparatus comprising:

5   a server system under test receiving one or more

6   packets of data;

7   a simulator that inserts a unique client identifier

8   to said one or more packets of data at level 2 of a

9   protocol stack, the unique client identifier representing

10   a unique client workstation; and

11   a communication channel interconnecting the server

12   system and the simulator, the simulator placing said one

13   or more packets of data on the communication channel for

14   transmission.